

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Canceled).

Claim 2 (Currently Amended): ~~The optical disc recording apparatus according to claim 1 wherein:~~ An optical disc recording apparatus comprising:

recording pulse generating means for setting a recording power at approximately the leading end portion of a recording pulse in steps of a plurality of stages and for generating a recording pulse of a pulse width corresponding to a length of a pit to be formed, said recording pulse generating means includes:

a first pulse generation circuit configured to generate a first pulse,

a second pulse generation circuit configured to generate a second pulse, and

a third pulse generation circuit configured to generate a third pulse; wherein

said recording pulse generating means includes a pulse combining mechanism configured to combine said first pulse, said second pulse, and said third pulse to form said recording pulse; and

laser means for illuminating laser light based on the recording pulse supplied to form a recording data string comprised of pits and lands on a recording medium;

wherein said laser light based on the recording pulse generated by said recording pulse generating means is illuminated on a write-once optical disc as said recording medium to effect recording; and

said first pulse corresponds to recording data, said second pulse is synthesized a predetermined time after a leading end of said first pulse and said third pulse is synthesized another predetermined time before a trailing leading end of said first pulse, said third pulse being of a pulse width smaller than said second pulse.

Claim 3 (Previously Presented): The optical disc recording apparatus according to claim 2 wherein:

said recording pulse generating means varies the pulse width and/or the pulse level of one or more of said first to third pulses, depending on recording conditions, to generate said recording pulse.

Claim 4 (Previously Presented): The optical disc recording apparatus according to claim 2 wherein:

said recording pulse generating means includes pit/land length detection means for detecting the length of the pit/land to be formed and varies the pulse width and/or the pulse level of one or more of said first to third pulses, depending on the combinations of the lengths of the pits/lands to be formed, based on a detection output by said pit/land length detection means, to generate a recording pulse.

Claim 5 (Previously Presented): The optical disc recording apparatus according to claim 2 wherein:

said recording pulse generating means varies the pulse width and/or the pulse level of one or more of said first to third pulses, depending on conditions of an optical disc for recording, to generate the recording pulse of a pulse width.

Claim 6 (Previously Presented): The optical disc recording apparatus according to claim 4 wherein:

said recording pulse generating means variably sets the pulse width of one or more of said first to third pulses responsive to at least one of the length of the pit formed directly previously and the length of the land formed directly previously.

Claim 7 (Previously Presented): The optical disc recording apparatus according to claim 4 wherein:

said recording pulse generating means varies the pulse width of said first pulse depending on the length of a land formed directly ahead of a pit formed.

Claim 8 (Previously Presented): The optical disc recording apparatus according to claim 7 wherein:

said recording pulse generating means varies the pulse width of said first pulse depending on the length of a pit formed.

Claim 9 (Previously Presented): The optical disc recording apparatus according to claim 7 wherein:

said recording pulse generating means varies the pulse width of said first pulse depending on the length of a land formed directly at back of a pit formed.

Claim 10 (Currently Amended): ~~The optical disc recording apparatus according to claim 1 further comprising:~~ An optical disc recording apparatus comprising:

recording pulse generating means for setting a recording power at approximately the leading end portion of a recording pulse in steps of a plurality of stages and for generating a recording pulse of a pulse width corresponding to a length of a pit to be formed, said recording pulse generating means includes:

a first pulse generation circuit configured to generate a first pulse,

a second pulse generation circuit configured to generate a second pulse, and

a third pulse generation circuit configured to generate a third pulse; wherein

said recording pulse generating means includes a pulse combining mechanism configured to combine said first pulse, said second pulse, and said third pulse to form said recording pulse;

laser means for illuminating laser light based on the recording pulse supplied to form a recording data string comprised of pits and lands on a recording medium; and

changeover means for switching the operation of said recording drive pulse generating means to preclude outputting of at least one of said first to third pulses generated by said recording pulse generating means, said recording pulse generating means performing switching control of said changeover means in association with a speed of forming a recording data string on said recording medium;

wherein said laser light based on the recording pulse generated by said recording pulse generating means is illuminated on a write-once optical disc as said recording medium to effect recording.

Claim 11 (Previously Presented): The optical disc recording apparatus according to claim 10 wherein:

said recording pulse generating means controls said changeover means so that, if said optical disc is rotated at a linear speed not higher than a speed four times a reference speed, said third pulse is not output.

Claim 12 (Canceled).

Claim 13 (Currently Amended): ~~The recording method for an optical disc according to claim 12 wherein:~~ A recording method for an optical disc comprising steps of:

generating a first pulse with a first pulse generation circuit, a second pulse with a second pulse generation circuit, and a third pulse with a third pulse generating circuit;

combining said first pulse, said second pulse, and said third pulse to form a recording pulse having a pulse width corresponding to a length of a pit formed, said recording pulse being so formed that a recording power at approximately the forward end thereof is stepped over plural stages; and

illuminating a laser light beam, excited in pulsed light by said recording pulse, on a write-once optical disc to effect recording;

wherein said first pulse corresponds to recording data, said second pulse is synthesized a predetermined time after a leading end of said first pulse and said third pulse is synthesized another predetermined time before a trailing leading end of said first pulse, and said third pulse is generated with a pulse width smaller than said second pulse.

Claim 14 (Previously Presented): The recording method for an optical disc according to claim 13 wherein:

recording is performed as the pulse width and/or the pulse level of one or more of said first to third pulses is controlled depending on a recording condition.

Claim 15 (Previously Presented): The recording method for an optical disc according to claim 13 wherein:

recording is performed as the pulse width and/or the pulse level of one or more of said first to third pulses is controlled depending on different combinations of the lengths of the pits/lands formed.

Claim 16 (Previously Presented): The recording method for an optical disc according to claim 13 wherein:

recording is performed as the pulse width and/or the pulse level of one or more of said first to third pulses is varied depending on the condition of the optical disc to effect recording.